

Remarks

Favorable reconsideration of this application, in view of the above amendments and in light of the following remarks and discussion, is respectfully requested.

Claims 1-8 and 13-15 are currently pending in the application; Claims 1-4, 6, and 7 having been amended, non-elected Claims 9-12 having been canceled without prejudice or disclaimer, and new independent Claims 13-15 having been added, by way of the present response. Applicants respectfully assert that support for the changes to the claims is self-evident from the originally filed disclosure, including the original claims, and that therefore no new matter has been added.

In the outstanding Office Action Claims 1, 2, and 5-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,806,455 to LaBianca in view of U.S. Patent No. 3,920,187 to Willis.

Initially, Applicants express thanks for the Examiner's indication that Claims 3 and 4 recite allowable subject matter, such that the claims, although having been objected, would be allowable if rewritten in independent form. In response, Applicants have amended independent Claim 6 to recite features of originally filed dependent Claim 3. Claims 7 and 8 depend from independent Claim 6. Applicants have further amended Claims 6 and 7 in a non-narrowing manner to remedy potential informalities and to place the claims in better condition for allowance. Applicants have further added new independent Claim 13, which recite features of original Claims 1 and 3, as well as new independent Claims 14 and 15, which recite features of original Claims 2 and 3 and original Claims 2 and 4, respectively. Thus, Applicants respectfully request the allowance of Claims 6-8 and 13-15.

As stated above Claims 1, 2, and 5-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over LaBianca in view of Willis. Applicants respectfully assert that the above amendments to the claims have overcome the rejection for the following reasons.

Applicants have amended independent Claims 1 and 2 to recite differing features of the invention, and have further amended Claims 1-4 in a non-narrowing manner to remedy potential informalities and to place the claims in better conformity with standard U.S. practice.

The present invention is directed to apparatuses for forming a coating film. Independent Claims 1 and 2 recite, among other features, a nozzle configured to drop a coating liquid in a rod-like state with a gyration given by gyrating force generating means or in accordance with a spiral groove, respectively.

LaBianca is directed to thermal stabilization of photoresist images. As shown in Figure 2, for example, of LaBianca, an ultrasonic nozzle assembly 12 is mounted in a fixed, stationary position above substrate 28 at a height such that a pattern of droplets 24 being generated by atomizing surface 20 covers an area 26 which extends substantially across a whole width of the substrate 28.¹

Applicants respectfully assert that LaBianca does not teach or suggest, however, the claimed features of a nozzle configured to drop a coating liquid in a rod-like state, as recited in independent Claims 1 and 2. Rather, Applicants respectfully assert that the ultrasonic nozzle assembly 12 generates the pattern of droplets 24 that covers the whole width of substrate 28, for example.

Specifically, independent Claim 1 recites “the nozzle is configured to drop the coating liquid in a rod-like state with a gyration given by the gyrating force generating means,” and independent Claim 2 recites “the nozzle is configured to drop the coating liquid in a rod-like state with a gyration given by the gyrating force generating means.”

¹ Column 4, lines 47-52.

The Office Action relies on Willis in an attempt to remedy the deficiencies of LaBianca. Applicants respectfully assert that Willis does not remedy these deficiencies, however, for the following reasons.

Willis is directed to a spray head. As shown in Figure 3, for example, of Willis, deflected sheets of fluid spread and form sheets of spray.² Thus, Applicants respectfully assert that Willis also does not teach or suggest the claimed features of a nozzle configured to drop a coating liquid in a rod-like state, as recited in independent Claims 1 and 2.

Thus, for the above reasons, Applicants respectfully assert that neither LaBianca nor Willis, whether taken alone or in combination, teaches or suggests the claimed features recited in independent Claims 1 and 2. Therefore, Applicants respectfully request that the rejection of independent Claims 1 and 2 under 35 U.S.C. § 103(a) be withdrawn and the independent claims allowed.

Applicants respectfully assert that Claims 3-5 are allowable for the same reasons as independent Claims 2, from which they depend, as well as for their own features. Thus, Applicants respectfully request that the objection to and rejection of Claims 3-5 be withdrawn, and the allowance of dependent Claims 3-5.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-8 and 13-15 is earnestly solicited.

² Column 2, lines 48-49.

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Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)

Philip J. Hoffman
Registration No. 46,340

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